

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-17. (Canceled).

18. (New) Method for qualifying gemstones by discerning gemstones from one another on the basis of their electrical conductivity, comprising:

(i) placing at least a part of a gemstone (15,16,17) that is to be qualified in the electrical stray field of a capacitor;

(ii) measuring the electrical capacitance of the capacitor;

(iii) comparing the measured capacitance to a reference capacitance of this capacitor when a reference material (12) is placed in the electrical stray field, the reference material (12) having a dielectric constant which is smaller than 15 and larger than that of the gemstone (15,16,17) to be qualified, and

(iv) qualifying the gemstone (15,16,17) as a gemstone with electrical conductivity when the measured capacitance of said capacitor, when said part of the gemstone (15,16,17) is in the stray electric field, is larger than said reference capacitance.

19. (New) Method according to claim 18, wherein said reference material (12) has a dielectric constant which is at least equal to that of diamonds.

20. (New) Method according to claim 18, wherein, in order to measure said reference capacitance, the reference

material (12) has a relative dielectric constant which is larger than 9.7.

21. (New) Method according to claim 18, wherein, in order to measure said capacitance, or said reference capacitance, said part of the gemstone (15,16,17) to be qualified, or said reference material (12) respectively, is placed within the measuring range of a capacitive measuring probe (1).

22. (New) Method according to claim 21, wherein the measuring probe (1) comprises two concentric cylinders (2,3) made of an electrically conductive material, each cylinder having an edge, and wherein the gemstone (15,16,17) to be qualified or said reference material (12) is placed in the electrical stray field (6) formed on the edges (4,5) of said cylinders (2,3).

23. (New) Method according to claim 21, wherein the measuring probe (1) comprises two coaxial electrodes (2,3), each with a polygonal section and each having an edge, and wherein the gemstone (15,16,17) to be qualified, or said reference material (12), is placed in the electrical stray field (6) formed on the edges (4,5) of said electrodes (2,3).

24. (New) Method according to claim 18, wherein said capacitance is measured via at least one facet (11) of the gemstone (15,16,17) to be qualified.

25. (New) Method according to claim 18, wherein said capacitor has electrodes and said gemstone (15,16,17) to be qualified is electrically insulated in relation to the electrodes (2,3) of said capacitor.

26. (New) Method according to claim 18, wherein said capacitor is provided with a shield in order to prevent its capacitance from being influenced by electrically conductive parts of a jewel in which the gemstone (15,16,17) to be qualified is set.

27. (New) Method according to claim 18, wherein diamond is used as said reference material (12).

28. (New) Device for qualifying gemstones by discerning gemstones from one another on the basis of their electrical conductivity, said device comprising:

- a capacitor producing an electrical stray field and in which at least a part of a gemstone (15,16,17) to be qualified can be placed;
 - a measurement converter (9) for generating a signal as a function of the capacitance of said capacitor when at least the part of the gemstone to be qualified is placed in the electrical stray field of the capacitor;
 - a read-out unit (10) for displaying said signal;
- and
- means for generating a signal when the measured capacitance for the gemstone (15,16,17) to be qualified, placed in said electrical stray field, is larger than a reference capacitance value in relation to which this device is calibrated and which is at least equal to the capacitance value of said capacitor when a reference material (12) is placed in said electrical stray field, said reference material (12) having a dielectric constant which is smaller than 15 and larger than that of the gemstone (15,16,17) to be qualified.

29. (New) Device according to claim 28, wherein said device is calibrated in relation to a reference capacitance value that is at least equal to the capacitance

value of said capacitor when a material with a dielectric constant that is larger than that of diamonds is placed in the electrical stray field of this capacitor.

30. (New) Device according to claim 28 or 29, wherein said capacitor comprises a capacitive measuring probe (1).

31. (New) Device according to claim 28 or 29, wherein said capacitor has electrodes, and further comprising an electrical isolator provided between the gemstone (15,16,17) to be qualified and the electrodes (2,3) of said capacitor.

32. (New) Device according to claim 28 or 29, wherein said capacitor comprises a shield in order to prevent its capacitance from being influenced by electrically conductive parts of a jewel in which the gemstone (15,16,17) to be qualified is set.